ELSEVIER

Thin Solid Films 348 (1999) 314–315

thin solid films

Author Index of Volume 348

Achiq, A., 74
Agulló-Rueda, F., 152
Avila, R.E., 44
Azam, M., 14
Azumi, K., 134

Bachari, E.M., 165
Battut, V., 266
Baud, G., 165
Ben Amor, S., 165
Bendavid, A., 145
Berg, S., 227
Biernat, J.F., 173
Bilewicz, R., 173
Blanc, J.P., 266
Bondarenko, V.P., 141
Bosio, A., 49

Caballero, J.V., 44
Calvo, J.I., 22
Calzada, M.L., 253
Cameron, M.A., 90
Canevari, V., 49
Cao, C.-B., 99
Caputo, D., 79
Castaño, F.J., 233
Chandar Shekar, B., 122
Chen, Y., 114
Chiaia, G., 3
Cho, K.R., 56
Choi, S.-Y., 69
Cook, J., 14
Cozzi, S., 49
Czapkiewicz, M., 233

de Cesare, G., 79
Dijon, J., 215
Dolgyi, L.N., 141

Eisele, I., 44

Fan, F., 238
Findikoglu, A.T., 39
Flath, J., 188
Fu, Q., 99
Fuenzalida, V.M., 44

George, S.M., 90
Gibbs, M.R.J., 233
Gong, Z., 114
González-Velasco, J., 152
Göthelid, M., 3
Gottschalch, V., 196
Goumet, E., 266
Gourbilleau, F., 74
Grau, P., 103
Grupen, M., 14
Guerrero-Lemus, R., 152

He, H., 30
Hedlund, C., 227
Hernández, A., 22
Herranen, M., 202
Hesse, R., 103
Hiro, T., 248
Hirschauer, B., 3
Hogmark, S., 202
Hwang, J.-S., 299
Hyun, S.-H., 69

Ignat, M., 215
Imai, Y., 63
Inokuchi, Y., 134

Jacquet, M., 165
Jahne, E., 279
Jia, Q.X., 39
Jiang, X., 84
Jiménez, R., 253
Jonsson, L.B., 227
Jungk, G., 279

Kageyama, Y., 134
Karlsson, U.O., 3
Katardjiev, I.V., 227
Kim, K.H., 210
Kim, Y.-I., 210
Kissine, V.V., 304
Knoll, W., 188
Kochowski, S., 180
Koel, B.E., 30
Koivusaari, K.J., 103
Kopcewicz, M., 233
Kulkarni, S.K., 261
Kylner, C., 222

Lakatos, E., 273
Lee, C.H., 56
Lee, J.-H., 130
Lee, Y.-J., 299
Leung, P., 14
Levchenko, V.I., 141
Li, C., 242
Li, X.-d., 238
Li, Y.-Q., 242
Lim, W.T., 56
Lippold, G., 103
Lobo, A., 261
Lorenz, D., 103
Lorenz, M., 103
Lu, P., 39
Luboch, E., 173

Mangalaraj, D., 122
Manorama, S.V., 261
Marcos, M.L., 152
Martínez-Duart, J.M., 152
Martín-Palma, R.J., 152
Martin, P.J., 145
Matsui, T., 145
Mattsson, L., 222
Meldrum, F.C., 188
Mendiola, J., 253
Miyashita, T., 238
Monteil, Y., 266
Moreno, J.D., 152
Mosch, S., 103

Nagatomo, T., 294
Nakayama, Y., 8
Narayandass, S.K., 122
Nascetti, A., 79
Nitsch, K., 180
Nordin, M., 202
Nosaka, T., 8
Ogawa, S., 8
Okamoto, A., 8
Ouyang, J.-M., 242

Palacio, L., 22
Palma, F., 79
Park, B.H., 210
Park, C.-G., 69
Park, C.-O., 299
Park, M.-Y., 130
Paszkiewicz, R., 180
Pennelli, G., 157
Penza, M., 49
Pietzonka, I., 196
Postnova, L.I., 141
Poulingue, M., 215
Prádanos, P., 22

Rao, V.J., 261
Reddy, C.V.G., 261
Rhee, S.-W., 130
Riede, V., 103
Rizk, R., 74
Romeo, N., 49

Sakakibara, T., 145
Sakthivel, S., 122
Sass, T., 196
Seo, M., 134
Soulière, V., 266
Stobiecki, T., 233
Stoica, T.A., 273
Stoica, T.F., 273
Stoop, P.M., 285
Streubel, P., 103
Suh, B.-S., 299
Swami, N., 30
Sysoev, V.V., 304
Szargan, R., 103

Tagliente, M.A., 49
Takikawa, H., 145
Tedeschi, R., 49
Thärigen, T., 103
Tönsing, D.L., 285

0040-6090/99/$ - see front matter © 1999 Elsevier Science S.A. All rights reserved.
PII: S0040-6090(99)00309-0

ELSEVIER

Thin Solid Films 348 (1999) 314–315

thin solid films

Author Index of Volume 348

Achiq, A., 74
Agulló-Rueda, F., 152
Avila, R.E., 44
Azam, M., 14
Azumi, K., 134

Bachari, E.M., 165
Battut, V., 266
Baud, G., 165
Ben Amor, S., 165
Bendavid, A., 145
Berg, S., 227
Biernat, J.F., 173
Bilewicz, R., 173
Blanc, J.P., 266
Bondarenko, V.P., 141
Bosio, A., 49

Caballero, J.V., 44
Calvo, J.I., 22
Calzada, M.L., 253
Cameron, M.A., 90
Canevari, V., 49
Cao, C.-B., 99
Caputo, D., 79
Castaño, F.J., 233
Chandar Shekar, B., 122
Chen, Y., 114
Chiaia, G., 3
Cho, K.R., 56
Choi, S.-Y., 69
Cook, J., 14
Cozzi, S., 49
Czapkiewicz, M., 233

de Cesare, G., 79
Dijon, J., 215
Dolgyi, L.N., 141

Eisele, I., 44

Fan, F., 238
Findikoglu, A.T., 39
Flath, J., 188
Fu, Q., 99
Fuenzalida, V.M., 44

George, S.M., 90
Gibbs, M.R.J., 233
Gong, Z., 114
González-Velasco, J., 152
Göthelid, M., 3
Gottschalch, V., 196
Goumet, E., 266
Gourbilleau, F., 74
Grau, P., 103
Grupen, M., 14
Guerrero-Lemus, R., 152

He, H., 30
Hedlund, C., 227
Hernández, A., 22
Herranen, M., 202
Hesse, R., 103
Hiro, T., 248
Hirschauer, B., 3
Hogmark, S., 202
Hwang, J.-S., 299
Hyun, S.-H., 69

Ignat, M., 215
Imai, Y., 63
Inokuchi, Y., 134

Jacquet, M., 165
Jahne, E., 279
Jia, Q.X., 39
Jiang, X., 84
Jiménez, R., 253
Jonsson, L.B., 227
Jungk, G., 279

Kageyama, Y., 134
Karlsson, U.O., 3
Katardjiev, I.V., 227
Kim, K.H., 210
Kim, Y.-I., 210
Kissine, V.V., 304
Knoll, W., 188
Kochowski, S., 180
Koel, B.E., 30
Koivusaari, K.J., 103
Kopcewicz, M., 233
Kulkarni, S.K., 261
Kylner, C., 222

Lakatos, E., 273
Lee, C.H., 56
Lee, J.-H., 130
Lee, Y.-J., 299
Leung, P., 14
Levchenko, V.I., 141
Li, C., 242
Li, X.-d., 238
Li, Y.-Q., 242
Lim, W.T., 56
Lippold, G., 103
Lobo, A., 261
Lorenz, D., 103
Lorenz, M., 103
Lu, P., 39
Luboch, E., 173

Mangalaraj, D., 122
Manorama, S.V., 261
Marcos, M.L., 152
Martínez-Duart, J.M., 152
Martín-Palma, R.J., 152
Martin, P.J., 145
Matsui, T., 145
Mattsson, L., 222
Meldrum, F.C., 188
Mendiola, J., 253
Miyashita, T., 238
Monteil, Y., 266
Moreno, J.D., 152
Mosch, S., 103

Nagatomo, T., 294
Nakayama, Y., 8
Narayandass, S.K., 122
Nascetti, A., 79
Nitsch, K., 180
Nordin, M., 202
Nosaka, T., 8
Ogawa, S., 8
Okamoto, A., 8
Ouyang, J.-M., 242

Palacio, L., 22
Palma, F., 79
Park, B.H., 210
Park, C.-G., 69
Park, C.-O., 299
Park, M.-Y., 130
Paszkiewicz, R., 180
Pennelli, G., 157
Penza, M., 49
Pietzonka, I., 196
Postnova, L.I., 141
Poulingue, M., 215
Prádanos, P., 22

Rao, V.J., 261
Reddy, C.V.G., 261
Rhee, S.-W., 130
Riede, V., 103
Rizk, R., 74
Romeo, N., 49

Sakakibara, T., 145
Sakthivel, S., 122
Sass, T., 196
Seo, M., 134
Soulière, V., 266
Stobiecki, T., 233
Stoica, T.A., 273
Stoica, T.F., 273
Stoop, P.M., 285
Streubel, P., 103
Suh, B.-S., 299
Swami, N., 30
Sysoev, V.V., 304
Szargan, R., 103

Tagliente, M.A., 49
Takikawa, H., 145
Tedeschi, R., 49
Thärigen, T., 103
Tönsing, D.L., 285

0040-6090/99/$ - see front matter © 1999 Elsevier Science S.A. All rights reserved.
PII: S0040-6090(99)00309-0

van der Merwe, J.H., 285
Vanca, V., 273
Veeravazhuthi, V., 122
Voivenel, P., 74
Voroshilov, S.A., 304
Vorozov, N.N., 141

Wagner, G., 196
Wang, E.G., 114
Watanabe, A., 63
Wrona, J., 233

Xu, G.C., 114

Yakovtseva, V.A., 141
Yamaguchi, M., 294
Yang, H.-S., 69
Yoshitake, M., 8
Yun, J.-H., 130

Zaharescu, M., 273
Zawisza, I., 173
Zhang, W.J., 84
Zheng, W.-J., 242
Zhu, H.-S., 99

ELSEVIER

Thin Solid Films 348 (1999) 316–320

thin solid films

Subject Index of Volume 348

Absorption spectrum
Electrochromism of anodic oxide film on TiN coating in aqueous and non-aqueous electrolytes, 134
Acetylacetone
Preparation of alumina films from a new sol–gel route, 99
Acidity
Monolayer and Langmuir–Blodgett films of bilirubin dihexadecyl ester, 242
Additive
The effect of additives on the viscosity of dimethylaluminum hydride and FTIR diagnostics of the gas-phase reaction, 130
Alumina film
Preparation of alumina films from a new sol–gel route, 99
Aluminium
Growth, structure, dielectric and AC conduction properties of solution grown PVA films, 122
The effect of additives on the viscosity of dimethylaluminum hydride and FTIR diagnostics of the gas-phase reaction, 130
Enhanced optical performance of aluminium films by copper inclusion, 222
Amorphous material
Experimental evidence of boron induced charged defects in amorphous silicon materials, 79
Annealing
Charge transport and trapping in $BaTiO_3$ thin films flash evaporated on Si and SiO_2/Si, 44

Barium titanate
Charge transport and trapping in $BaTiO_3$ thin films flash evaporated on Si and SiO_2/Si, 44
Bilirubin derivatives
Monolayer and Langmuir–Blodgett films of bilirubin dihexadecyl ester, 242
Bismuth titanate
Preparation and properties of $Bi_4Ti_3O_{12}$ thin films grown at low substrate temperatures, 294
Boron
Experimental evidence of boron induced charged defects in amorphous silicon materials, 79
Buffer layer for HTS
Studies of highly oriented CeO_2 films grown on Si(111) by pulsed laser deposition, 3
Buffer layers
Heteroepitaxy of PbS on porous silicon, 141

Capacitors
Growth, structure, dielectric and AC conduction properties of solution grown PVA films, 122
Carbon silicon nitride thin film
Hard amorphous CSi_xN_y thin films deposited by rf nitrogen plasma assisted pulsed laser ablation of mixed graphite/Si_3N_4-targets, 103
Cerium oxide
Studies of highly oriented CeO_2 films grown on Si(111) by pulsed laser deposition, 3
Charge transfer
Control of the growth of ordered C_{60} films by chemical modification of Pt(111) surfaces, 30
Chemical vapor deposition
KrF laser CVD of titanium oxide from titanium tetraisopropoxide, 63
The contribution of H^+ ion etching during the initial deposition stage to the orientation grade of diamond films, 84
ZrO_2 film growth by chemical vapor deposition using zirconium tetra-*tert*-butoxide, 90
Influence of deposition condition and hydrogen on amorphous-to-polycrystalline SiCN films, 114
Effect of silicon addition on microstructure and mechanical property of titanium nitride film prepared by plasma-assisted chemical vapor deposition, 210
Chemisorption and physisorption
Control of the growth of ordered C_{60} films by chemical modification of Pt(111) surfaces, 30
Composite film
Solderable film for bottom side of semiconductor chips, 1
Conduction
Conduction of metal–isolator–semiconductor structures with granular silicon thin films, 157
Conductivity
c-Axis oriented sol–gel $(Pb,Ca)TiO_3$ ferroelectric thin films on Pt/MgO, 253
Copper
Performance of vertical power devices with contact-level copper metallization, 14
Properties of reactively sputtered WN_x as Cu diffusion barrier, 299
A comparative study of SnO_2 and SnO_2:Cu thin films for gas sensor applications, 304
Copper double layer
Cu double layer on Mo(110): Phase transition, 285
Copper nitride film
Copper nitride thin films prepared by reactive radio-frequency magnetron sputtering, 8
Corrosion behavior
Influence of lamellae thickness on the corrosion behaviour of multilayered PVD TiN/CrN coatings, 202
Crown ether
Properties of *Z* and *E* isomers of azocrown ethers in monolayer

0040-6090/99/$ - see front matter © 1999 Elsevier Science S.A. All rights reserved.
PII: S0040-6090(99)000310-7

assemblies at the air–water interface, 173
Crystal growth
Formation of patterned PbS and ZnS films on self-assembled monolayers, 188
Crystal patterned array
Formation of patterned PbS and ZnS films on self-assembled monolayers, 188

Defect
Experimental evidence of boron induced charged defects in amorphous silicon materials, 79
Defects effect
The effects of particle pollution on the mechanical behaviour of multilayered systems, 215
Deposition process
Copper nitride thin films prepared by reactive radio-frequency magnetron sputtering, 8
Compositional variations of sputter deposited Ti/W barrier layers on substrates with pronounced surface topography, 227
c-Axis oriented sol–gel (Pb,Ca)TiO_3 ferroelectric thin films on Pt/MgO, 253
Diamond film
The contribution of H^+ ion etching during the initial deposition stage to the orientation grade of diamond films, 84
Dielectric constant
Ambient-dried SiO_2 aerogel thin films and their dielectric application, 69
Dielectric properties
Charge transport and trapping in $BaTiO_3$ thin films flash evaporated on Si and SiO_2/Si, 44
Growth, structure, dielectric and AC conduction properties of solution grown PVA films, 122
Dielectrics
Electrical energy released from structure of Al/polyimide LB film/Au, 248
Diffusion
Electrical energy released from structure of Al/polyimide LB film/Au, 248
Dimethylaluminum hydride
The effect of additives on the viscosity of dimethylaluminum hydride and FTIR diagnostics of the gas-phase reaction, 130

E isomer
Properties of *Z* and *E* isomers of azocrown ethers in monolayer assemblies at the air–water interface, 173
Electrical measurement
Electrical properties of SiO_2–(n) GaAs interface on the basis of measurements of MIS structure capacitance and conductance, 180
Electrical properties
Effects of hydrogen partial pressure on the structure and properties of sputtered silicon layers, 74
Electrical properties of SiO_2–(n) GaAs interface on the basis of measurements of MIS structure capacitance and conductance, 180
Electrical properties and measurements
Performance of vertical power devices with contact-level copper metallization, 14
Charge transport and trapping in $BaTiO_3$ thin films flash evaporated on Si and SiO_2/Si, 44
Electrical energy released from structure of Al/polyimide LB film/Au, 248
Electrochromism
Electrochromism of anodic oxide film on TiN coating in aqueous and non-aqueous electrolytes, 134
Electroluminescence
High quality ZnS:Mn thin films grown by quasi-rheotaxy for electroluminescent devices, 49
Ellipsometry
Optical properties of film–substrate systems with an anisotropic, spatially varying dielectric function of the surface layer, 279
Embedded-atom potential
Cu double layer on Mo(110): phase transition, 285
Epitaxy
Effects of homo-epitaxial $LaAlO_3$ layer on microstructural properties of $SrTiO_3$ films grown on $LaAlO_3$ substrates, 39

Ferroelectric properties
c-Axis oriented sol–gel (Pb,Ca)TiO_3 ferroelectric thin films on Pt/MgO, 253
Ferroelectricity
Preparation and properties of $Bi_4Ti_3O_{12}$ thin films grown at low substrate temperatures, 294
Field effect
NO_2 sensor based on InP epitaxial thin layers, 266
Fluorinated polymer
Frictional properties of poly(*N*-polyfluoroalkylacrylamides) Langmuir–Blodgett films, 238
Fourier transform infrared spectroscopy
The effect of additives on the viscosity of dimethylaluminum hydride and FTIR diagnostics of the gas-phase reaction, 130
Friction coefficient
Frictional properties of poly(*N*-polyfluoroalkylacrylamides) Langmuir–Blodgett films, 238
Fullerenes
Control of the growth of ordered C_{60} films by chemical modification of Pt(111) surfaces, 30

Gallium arsenide
Electrical properties of SiO_2–(n) GaAs interface on the basis of measurements of MIS structure capacitance and conductance, 180
Gas penetration
Porosity measurements by a gas penetration method and other techniques applied to membrane characterization, 22
Glass
Growth, structure, dielectric and AC conduction properties of solution grown PVA films, 122
Granular silicon
Conduction of metal–isolator–semiconductor structures with granular silicon thin films, 157
Growth rate
ZrO_2 film growth by chemical vapor deposition using zirconium tetra-*tert*-butoxide, 90

Hardness
Hard amorphous CSi_xN_y thin films deposited by rf nitrogen plasma assisted pulsed laser ablation of mixed graphite/Si_3N_4-targets, 103

Properties of titanium oxide film prepared by reactive cathodic vacuum arc deposition, 145
Effect of silicon addition on microstructure and mechanical property of titanium nitride film prepared by plasma-assisted chemical vapor deposition, 210
Heating temperature
Ambient-dried SiO_2 aerogel thin films and their dielectric application, 69
Heteroepitaxy
Heteroepitaxy of PbS on porous silicon, 141
Hydrogenated nanocrystalline silicon
Effects of hydrogen partial pressure on the structure and properties of sputtered silicon layers, 74

In_2O_3:Sn/tube-Si heterostructure
Colloidal sol-gel ITO films on tube grown silicon, 273
Infrared absorption
Effects of hydrogen partial pressure on the structure and properties of sputtered silicon layers, 74
InP
NO_2 sensor based on InP epitaxial thin layers, 266
Interface state
Electrical properties of SiO_2–(n) GaAs interface on the basis of measurements of MIS structure capacitance and conductance, 180
Optical properties of film–substrate systems with an anisotropic, spatially varying dielectric function of the surface layer, 279
Ion bombardment
Compositional variations of sputter deposited Ti/W barrier layers on substrates with pronounced surface topography, 227
Ion plating
Properties of titanium oxide film prepared by reactive cathodic vacuum arc deposition, 145
Iron
Magnetic and morphological properties of ultrathin Fe layers in Zr/Fe/Zr trilayer structures, 233

Langmuir–Blodgett films
Frictional properties of poly(*N*-polyfluoroalkylacrylamides) Langmuir–Blodgett films, 238
Monolayer and Langmuir–Blodgett films of bilirubin dihexadecyl ester, 242
Electrical energy released from structure of Al/polyimide LB film/Au, 248
Laser ablation
Studies of highly oriented CeO_2 films grown on Si(111) by pulsed laser deposition, 3
Hard amorphous CSi_xN_y thin films deposited by rf nitrogen plasma assisted pulsed laser ablation of mixed graphite/Si_3N_4-targets, 103
Laser CVD
KrF laser CVD of titanium oxide from titanium tetraisopropoxide, 63
Light scattering
Enhanced optical performance of aluminium films by copper inclusion, 222
Low contrast thin film
Formation of patterned PbS and ZnS films on self-assembled monolayers, 188
Low temperature
Preparation and properties of $Bi_4Ti_3O_{12}$ thin films grown at low substrate temperatures, 294
Lubricant
Frictional properties of poly(*N*-polyfluoroalkylacrylamides) Langmuir–Blodgett films, 238

Magnetic properties
Magnetic and morphological properties of ultrathin Fe layers in Zr/Fe/Zr trilayer structures, 233
Magnetron sputtering deposition
Copper nitride thin films prepared by reactive radio-frequency magnetron sputtering, 8
Membrane characterization
Porosity measurements by a gas penetration method and other techniques applied to membrane characterization, 22
Membrane structure
Porosity measurements by a gas penetration method and other techniques applied to membrane characterization, 22
Metal ions
Monolayer and Langmuir–Blodgett films of bilirubin dihexadecyl ester, 242
Metal–insulator–semiconductor structure (MIS)
Electrical properties of SiO_2–(n) GaAs interface on the basis of measurements of MIS structure capacitance and conductance, 180
Metallization
Performance of vertical power devices with contact-level copper metallization, 14
Properties of reactively sputtered WN_x as Cu diffusion barrier, 299
Molecular-beam epitaxy
Heteroepitaxy of PbS on porous silicon, 141
Molybdenum phase transition
Cu double layer on Mo(110): Phase transition, 285
Monolayers
Properties of *Z* and *E* isomers of azocrown ethers in monolayer assemblies at the air–water interface, 173
Monolayer and Langmuir–Blodgett films of bilirubin dihexadecyl ester, 242
Cu double layer on Mo(110): Phase transition, 285
Morphological properties
Magnetic and morphological properties of ultrathin Fe layers in Zr/Fe/Zr trilayer structures, 233
Multilayers
Influence of lamellae thickness on the corrosion behaviour of multilayered PVD TiN/CrN coatings, 202
The effects of particle pollution on the mechanical behaviour of multilayered systems, 215

Nanostructures
Influence of deposition condition and hydrogen on amorphous-to-polycrystalline SiCN films, 114
Nitrides
Properties of reactively sputtered WN_x as Cu diffusion barrier, 299
NO_2 sensor
NO_2 sensor based on InP epitaxial thin layers, 266
Optical and electrical properties
Colloidal sol-gel ITO films on tube grown silicon, 273

Optical properties
Properties of titanium oxide film prepared by reactive cathodic vacuum arc deposition, 145
Structural and optical properties of sputtered ZnO films, 165
Enhanced optical performance of aluminium films by copper inclusion, 222
Optical properties of film–substrate systems with an anisotropic, spatially varying dielectric function of the surface layer, 279
Ordering
Control of the growth of ordered C_{60} films by chemical modification of Pt(111) surfaces, 30
Organometallic vapor deposition
KrF laser CVD of titanium oxide from titanium tetraisopropoxide, 63
Correlation between the surface morphology and antiphase boundaries in ordered (GaIn)P, 196
Orientation grade
The contribution of H^+ ion etching during the initial deposition stage to the orientation grade of diamond films, 84
Oxide film
Electrochromism of anodic oxide film on TiN coating in aqueous and non-aqueous electrolytes, 134

Palladium
Solderable film for bottom side of semiconductor chips, 1
PbS
Heteroepitaxy of PbS on porous silicon, 141
Physical vapor deposition
Influence of lamellae thickness on the corrosion behaviour of multilayered PVD TiN/CrN coatings, 202
Polymer
Frictional properties of poly(*N*-polyfluoroalkylacrylamides) Langmuir–Blodgett films, 238
Polymer deposition
A galvanostatic study of the electrodeposition of polypyrrole into porous silicon, 152
Porosity
Porosity measurements by a gas penetration method and other techniques applied to membrane characterization, 22
Porous materials
Porosity measurements by a gas penetration method and other techniques applied to membrane characterization, 22
Porous silicon
Heteroepitaxy of PbS on porous silicon, 141
A galvanostatic study of the electrodeposition of polypyrrole into porous silicon, 152
Pulsed laser deposition: X-ray photoelectron spectroscopy
Studies of highly oriented CeO_2 films grown on Si(111) by pulsed laser deposition, 3

Quasi-rheotaxy
High quality ZnS:Mn thin films grown by quasi-rheotaxy for electroluminescent devices, 49

Raman spectroscopy
A galvanostatic study of the electrodeposition of polypyrrole into porous silicon, 152
Reflection spectroscopy
Optical properties of film–substrate systems with an anisotropic, spatially varying dielectric function of the surface layer, 279
Resistance
NO_2 sensor based on InP epitaxial thin layers, 266
Resistivity
Performance of vertical power devices with contact-level copper metallization, 14
Ruthenium oxide
Structural and electrical properties of r.f.-sputtered RuO_2 films having different conditions of preparation, 56

Scanning electron microscopy
Structural and electrical properties of r.f.-sputtered RuO_2 films having different conditions of preparation, 56
Selective etching
The contribution of H^+ ion etching during the initial deposition stage to the orientation grade of diamond films, 84
Self-assembled monolater
Formation of patterned PbS and ZnS films on self-assembled monolayers, 188
Semiconductor chips
Solderable film for bottom side of semiconductor chips, 1
Semiconductors
Noble metal additive modulation of gas sensitivity of $BaSnO_3$, explained by a work function based model, 261
Optical properties of film–substrate systems with an anisotropic, spatially varying dielectric function of the surface layer, 279
Sensors
Noble metal additive modulation of gas sensitivity of $BaSnO_3$, explained by a work function based model, 261
A comparative study of SnO_2 and SnO_2:Cu thin films for gas sensor applications, 304
Silicon
Solderable film for bottom side of semiconductor chips, 1
Preparation and properties of $Bi_4Ti_3O_{12}$ thin films grown at low substrate temperatures, 294
Silicon nitride
Effect of silicon addition on microstructure and mechanical property of titanium nitride film prepared by plasma-assisted chemical vapor deposition, 210
Sol–gel method
Preparation of alumina films from a new sol–gel route, 99
Solar cells
Experimental evidence of boron induced charged defects in amorphous silicon materials, 79
Colloidal sol-gel ITO films on tube grown silicon, 273
Sol-gel
Colloidal sol-gel ITO films on tube grown silicon, 273
Sputtering
Structural and electrical properties of r.f.-sputtered RuO_2 films having different conditions of preparation, 56
Effects of hydrogen partial pressure on the structure and properties of sputtered silicon layers, 74
Structural and optical properties of sputtered ZnO films, 165
Properties of reactively sputtered WN_x as Cu diffusion barrier, 299
Stability
ZrO_2 film growth by chemical vapor deposition using zirconium tetra-*tert*-butoxide, 90
Stress
The effects of particle pollution on the mechanical behaviour of

multilayered systems, 215
Strontium titanate
Effects of homo-epitaxial $LaAlO_3$ layer on microstructural properties of $SrTiO_3$ films grown on $LaAlO_3$ substrates, 39
Structural properties
Effects of homo-epitaxial $LaAlO_3$ layer on microstructural properties of $SrTiO_3$ films grown on $LaAlO_3$ substrates, 39
Structural and optical properties of sputtered ZnO films, 165
Superlattices
Correlation between the surface morphology and antiphase boundaries in ordered (GaIn)P, 196
Surface composition
Influence of deposition condition and hydrogen on amorphous-to-polycrystalline SiCN films, 114
Surface modification
Ambient-dried SiO_2 aerogel thin films and their dielectric application, 69
Surface morphology
Influence of deposition condition and hydrogen on amorphous-to-polycrystalline SiCN films, 114
Correlation between the surface morphology and antiphase boundaries in ordered (GaIn)P, 196
Surface pressure
Properties of *Z* and *E* isomers of azocrown ethers in monolayer assemblies at the air–water interface, 173
Surface roughness
Enhanced optical performance of aluminium films by copper inclusion, 222
Surface state
Electrical properties of SiO_2–(n) GaAs interface on the basis of measurements of MIS structure capacitance and conductance, 180
Optical properties of film–substrate systems with an anisotropic, spatially varying dielectric function of the surface layer, 279
Surface tension
Properties of *Z* and *E* isomers of azocrown ethers in monolayer assemblies at the air–water interface, 173

Tensile test
The effects of particle pollution on the mechanical behaviour of multilayered systems, 215
Thin film
Studies of highly oriented CeO_2 films grown on Si(111) by pulsed laser deposition, 3
Preparation and properties of $Bi_4Ti_3O_{12}$ thin films grown at low substrate temperatures, 294
Tin oxide
A comparative study of SnO_2 and SnO_2:Cu thin films for gas sensor applications, 304
TiN/CrN
Influence of lamellae thickness on the corrosion behaviour of multilayered PVD TiN/CrN coatings, 202
TiN
Electrochromism of anodic oxide film on TiN coating in aqueous and non-aqueous electrolytes, 134
Titanium
Compositional variations of sputter deposited Ti/W barrier layers on substrates with pronounced surface topography, 227
Titanium nitride
Effect of silicon addition on microstructure and mechanical property of titanium nitride film prepared by plasma-assisted chemical vapor deposition, 210
Titanium oxide
KrF laser CVD of titanium oxide from titanium tetraisopropoxide, 63
Properties of titanium oxide film prepared by reactive cathodic vacuum arc deposition, 145
Transmission electron microscopy
Effects of homo-epitaxial $LaAlO_3$ layer on microstructural properties of $SrTiO_3$ films grown on $LaAlO_3$ substrates, 39
Correlation between the surface morphology and antiphase boundaries in ordered (GaIn)P, 196
Tungsten
Compositional variations of sputter deposited Ti/W barrier layers on substrates with pronounced surface topography, 227

Vacancies
A comparative study of SnO_2 and SnO_2:Cu thin films for gas sensor applications, 304
Vibrational spectroscopy
Control of the growth of ordered C_{60} films by chemical modification of Pt(111) surfaces, 30
Viscosity
The effect of additives on the viscosity of dimethylaluminum hydride and FTIR diagnostics of the gas-phase reaction, 130
Volumetry
Porosity measurements by a gas penetration method and other techniques applied to membrane characterization, 22

Work function
Noble metal additive modulation of gas sensitivity of $BaSnO_3$, explained by a work function based model, 261

X-ray diffraction
Studies of highly oriented CeO_2 films grown on Si(111) by pulsed laser deposition, 3
Structural and electrical properties of r.f.-sputtered RuO_2 films having different conditions of preparation, 56
X-ray photoelectron spectroscopy
Hard amorphous CSi_xN_y thin films deposited by rf nitrogen plasma assisted pulsed laser ablation of mixed graphite/Si_3N_4-targets, 103
Noble metal additive modulation of gas sensitivity of $BaSnO_3$, explained by a work function based model, 261

Zinc oxide
Structural and optical properties of sputtered ZnO films, 165
Z isomer
Properties of *Z* and *E* isomers of azocrown ethers in monolayer assemblies at the air–water interface, 173
Zirconium
Magnetic and morphological properties of ultrathin Fe layers in Zr/Fe/Zr trilayer structures, 233
Zirconium oxide film
ZrO_2 film growth by chemical vapor deposition using zirconium tetra-*tert*-butoxide, 90
Zirconium tetra-*tert*-butoxide
ZrO_2 film growth by chemical vapor deposition using zirconium tetra-*tert*-butoxide, 90